

The M-16 and AR-15 Registered Receiver

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I have received a tremendous number of E-mails over the years from people asking me what the difference is between the AR-15 and M-16. I have also seen this question asked on the various Internet forums that I frequent and all too often the person receives an answer indicating that the difference is a long stay in club fed with a roommate named Bubba. It is the purpose of this page to show and describe the AR-15 and the M-16 including AR-15s that are converted to full auto which are commonly referred to as AR-15 Registered Receivers.

Remember, it is not possible for a United States Citizen to legally convert a Semi-Automatic AR-15 to full auto and doing such a conversion is a Federal Offence punishable by 10-years and Jail and \$250,000 fine!

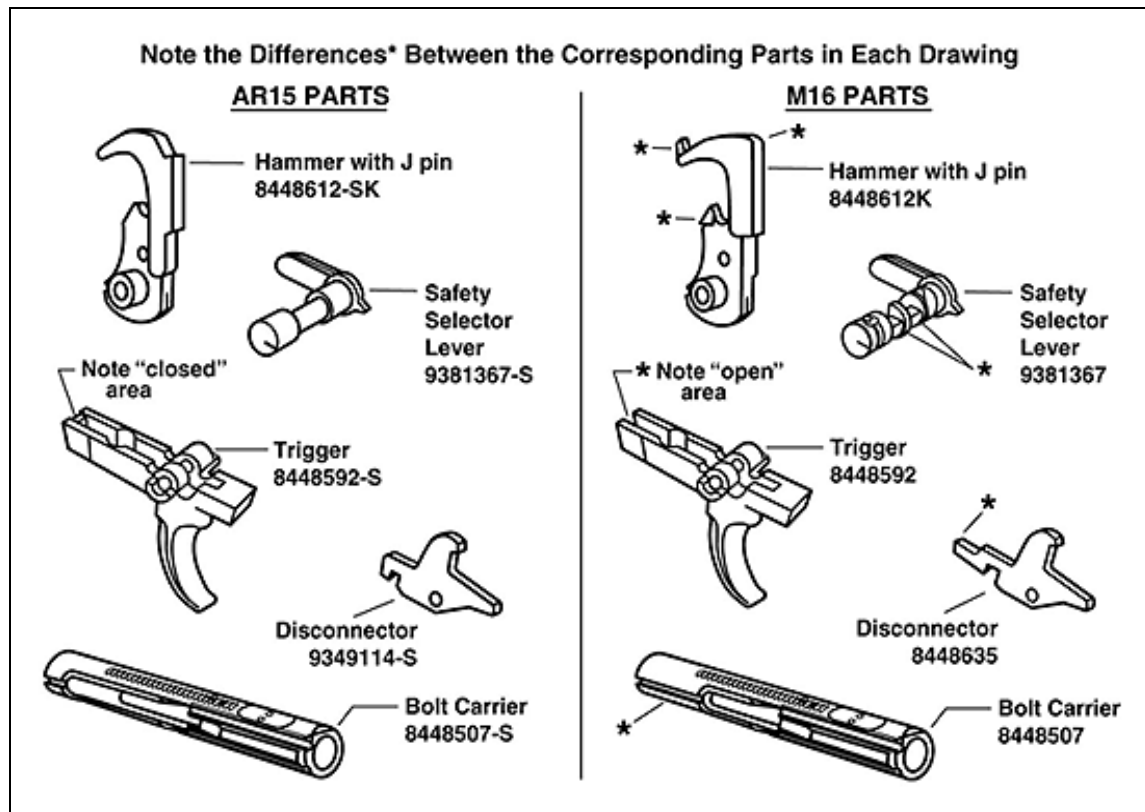
With the above statement, please also understand that there are LEGAL FULL-AUTO M-16s and AR-15s that were converted to full auto. These legal weapons are referred to as transferable weapons as they were registered with the ATF back when these could be registered and built and depending on the state you live in and your local laws, it may be possible for you to own one of these legal M-16 Machineguns.



What is the differences?

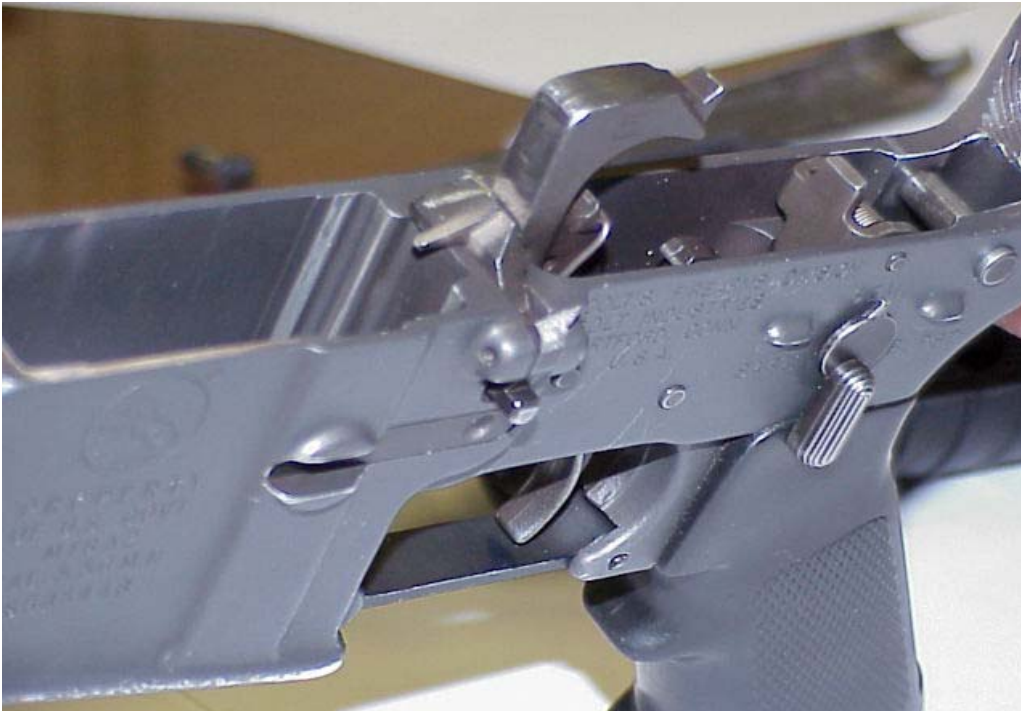
The photograph on the previous page shows an AR-15 on the left and an M-16 on the right. The primary differences that should be noticed include the difference in the milling of the internal portion of the M-16 receiver including a longer fire control group (FCG) cavity and deep shelves. This additional space is needed to allow the GI auto sear to fit, allows the arm of the auto sear to interact with the selector, and provides a surface of the spring of the auto sear to contact. The other two differences, which I hope, are obvious, include the auto sear on the right as well as the "J" hook or spur on the M-16 hammer. The AR-15 in this photo is actually using an M-16 hammer that had the spur removed to allow the hammer to be used with a 9mm upper in the AR-15.

Next, please refer to the following drawing that I have borrowed from AR15.com. This drawing shows the difference between AR-15 and M-16 parts. Please note that an AR-15 Registered Receiver is simply an AR-15 that was built as a Title 1 Semiautomatic rifle and was later converted to Full Auto by submitting the necessary paperwork to the ATF. Also note that it has not been possible for a civilian to apply to build a new Machinegun and do such a conversion since 1986 and this is the reason that AR-15 Registered Receivers are so expensive these days. Also note that the M-16 is the military designation for an AR-15 Registered Receiver and in general these are the same weapon.

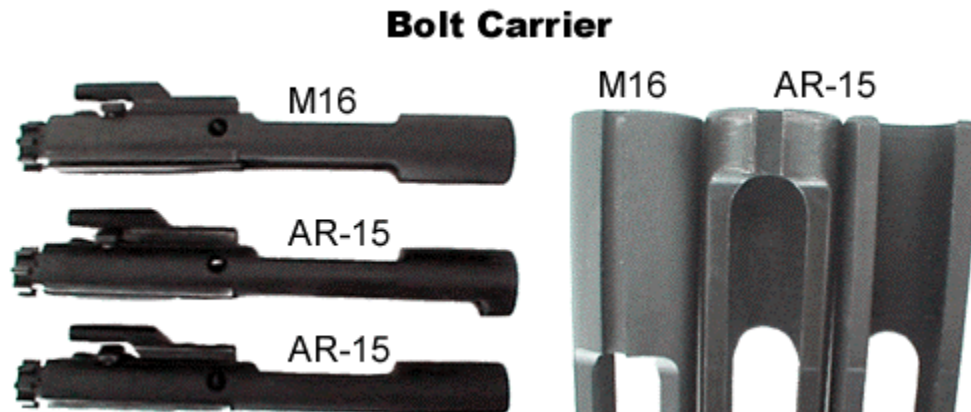




Above: DPMS Lower Receiver
Below: Colt M16A1 Receiver



Beyond the fire control parts as shown in the previous figures, the only additional part that is different between an AR-15 and the M-16 is the Bolt Carrier. The M-16 carrier is precisely located so that it will trip the auto sear at the correct time. The AR-15 carrier would not trip the auto sear. On the page on the Lightning Link, the reason for the "open" style AR-15 carrier is explained but I will briefly say that it was done to prevent the conversion of Colt AR-15s to full auto.



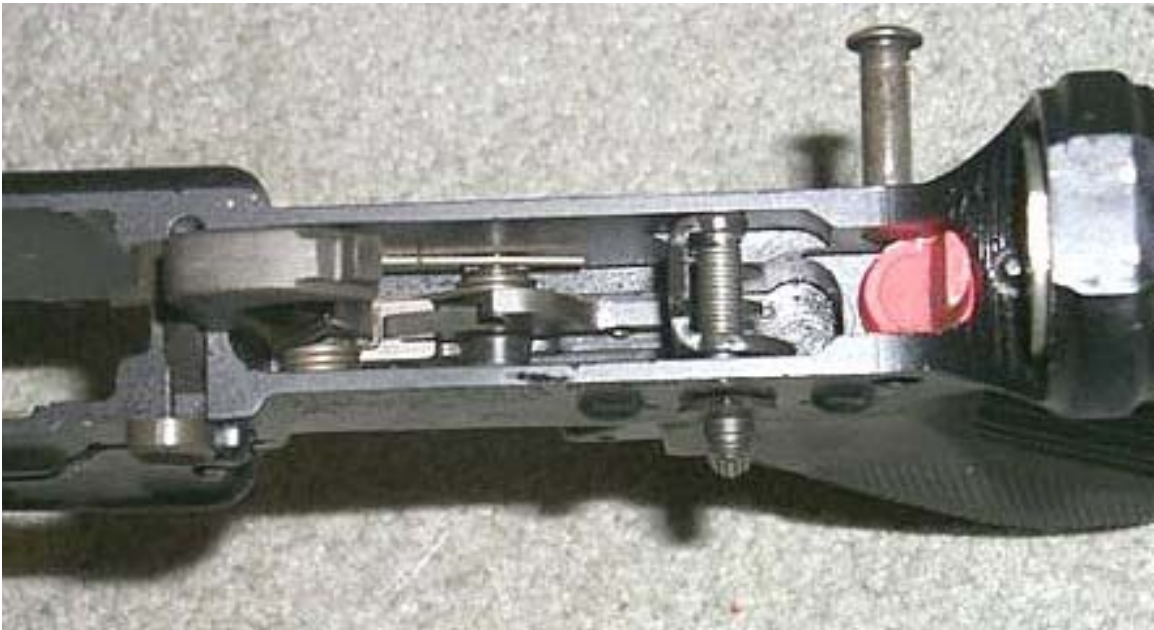
Following is a Colt sear block. The sear block was an addition that Colt did to prevent the addition of a Lightning Link or Drop In Auto Sear (DIAS) to these lowers. The location of the pin through the receiver that holds this sear block in place is also where a normal USGI Sear would go which would further complicate the conversion of a Sear blocked Colt to full-auto.



On the next page is a Colt AR-15 that has had its sear block removed. Note the lower below would work with a Lightning Link or Drop In Auto Sear but converting this to a M-16 style receiver would be impossible without first welding the hole in the side of the receiver where the pin was located that had held the sear block in place.



The photos that follow are three photos of AR-15 Registered Receivers.



Above: AR-15 Registered Receiver



Above: AR-15 Registered Receiver



Above: AR-15 Registered Receiver (Note Auto Sear hole above selector)

LEGAL NOTE: The material that follows is intended so that a viewer can see how these are built and appreciate the system... NOT TO BUILD AN ILLEGAL conversion. I assume no responsibility if anybody makes something from the following information and hurts himself or herself, destroys a weapon, or gets arrested and/or fined. Also remember that making a Lightning Link, Drop in Auto Sear or doing the following conversion are all the same and will result in a permanent loss of your rights to own firearms in the United States! You have been warned!

Converting an AR-15 to Full Auto

Following are the directions on how a properly licensed individual or government agency would convert a semi automatic AR-15 to full auto. Remember that civilians can not do this conversion!

Following is a set of directions and a few pictures that I was able to obtain of an Auto Sear Jig that a Legally Licensed Machine Gun manufacturer would use to convert an AR-15 to a Full auto M-16.



Photo above is an AR-15 semi auto receiver with a Class 2 auto sear drilling jig mounted. This photo was obtained from a LICENCED machinegun manufacturer to aid me with the preparation of this material. Do not do this at home!



AR15 to M16 Class 2 Drilling Fixture Instructions

Notice: Conversion of any weapon to fully automatic fire without a type 07 FFL and SOT paid to BATF is a Federal Felony punishable by up to ten years in prison and a \$250,000 fine!

- 1) Remove upper receiver from lower receiver.
- 2) Remove hammer, trigger, disconnecter and safety selector.
- 3) To remove selector, unscrew pistol grip retaining screw, taking off grip, being careful not to lose selector spring and plunger.
- 4) Attach drilling fixture loosely to the side of the receiver using the clamping bolt, washer and nut (provided). Put the bolt through the safety selector hole.
- 5) Tighten the bolt through the safety selector; hand tight is sufficient. Tighten the allen screw at the top of the fixture with a wrench to pull it tightly into position.
- 6) Carefully drill through one side of the receiver with a sharp 1/8" drill (.125"). If you use a dull drill bit, it will wallow out the hole in the fixture. Switch sides and repeat the process. Make sure that the hole is drilled straight and square with the receiver by letting the fixture guide the drill bit.

Warning: Drilling the auto sear hole in the lower receiver is considered by BATF to be manufacturing a machine gun. This applies even if you have no M16 Parts.

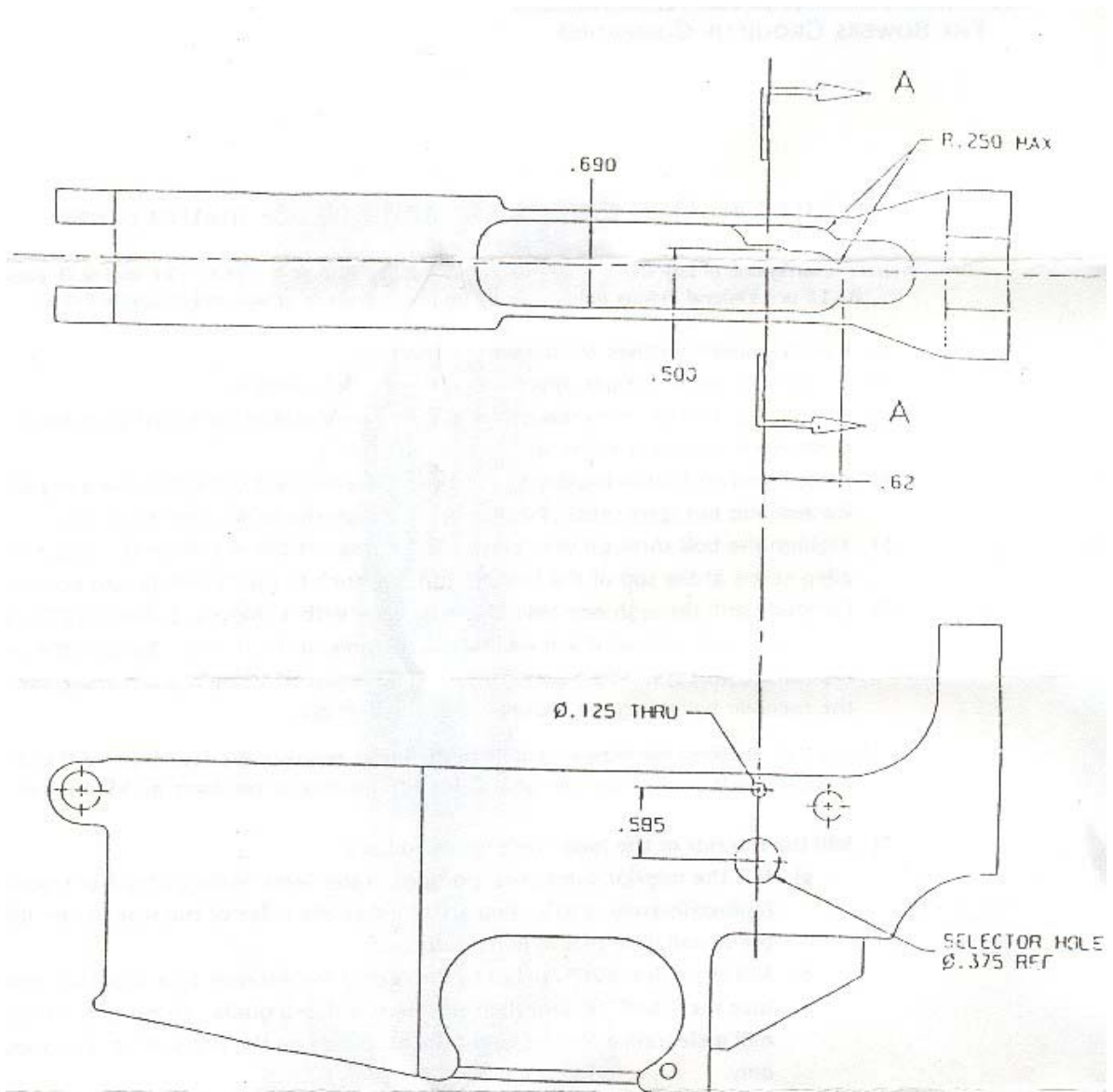
- 7) Mill the interior of the lower receiver as follows:
 - a) Mill the interior sides (rear portion) to the same width as the front portion (approximately .690"). You are thinning the sides of the receiver to allow the installation of a military auto sear.
 - b) Mill the sides .620" farther to the rear of the receiver to a depth of .620" (use the "shelf" behind the selector as a depth guide. Using a 1/2" end mill, mill a clearance for the tail of the auto sear on the left side of the receiver only.

For placement of hole and milling requirements, see drawing on the reverse side of this sheet.

The parts required to complete an original conversion are;

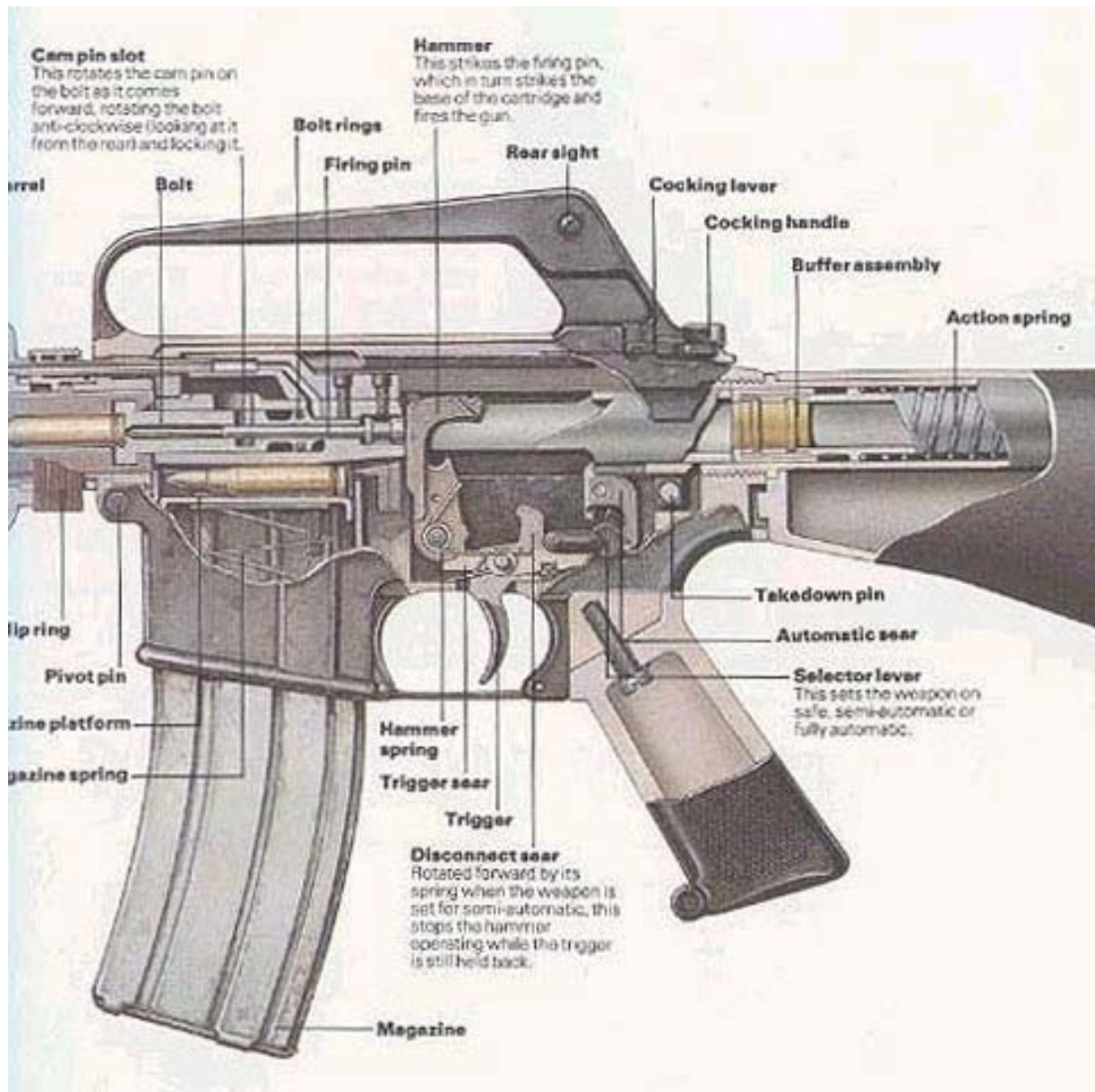
M16 hammer, trigger, disconnecter, selector, military auto sear and auto sear pin and full auto bolt carrier.

Following are diagrams that show the additional milling necessary to convert an AR-15 to M-16 profile.



Once an AR-15 lower receiver is drilled using an Class 2 Jig as shown above or by measuring and drilling the hole and the interior of the receiver is milled out the Class 2 manufacturer will replace the AR-15 parts for their corresponding M-16 parts as shown on page 2 of this document.

Following is a Cut-A-Way diagram that shows the relationship of the various fire control pieces inside the M-16 or AR-15 Registered Receiver.



For additional options for fire control groups and how these parts would be replaced please see the Military Manuals section of this CD. Also See: [AR15 to M16 Conversion Manual](#) that describes the same process but I like to think my description is better!

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